

[*TRIGGER MECHANISM FOR IMPACT RESPONSE DEVICES IN A SEAT*]

Abstract

An automotive seat assembly is provided including a seatback and a motion translation element pivotably mounted within. The motion translation element includes a back engagement portion, movable between a back engagement stable position and a back intrusion position, and a translation portion, movable from a translation stable position to a translation actuated position in response to the back engagement portion movement. A intermediary element is rotatably attached to the translation portion, such that it is moved between an intermediary stable position and an intermediary actuated position. The intermediary element is additionally movable between a disengagement position and a engagement position. A momentum cam is utilized to move the intermediary element into the engagement position during vehicle impact. A trigger arm is positioned within said seatback and engages the intermediary element when in said engagement position. The trigger arm moves into a trigger deployed position in response to the back engagement portion entering the back intru-

sion position only when in the engagement position. A seatback impact response device is actuated by the trigger arm when it moves into the trigger deployed position.